# Appendix U

Areas of Critical Environmental Concern

# 1. AREAS OF CRITICAL ENVIRONMENTAL CONCERN

#### 1.1. INTRODUCTION

Areas of Critical Environmental Concern (ACECs) are lands where special management attention is needed to prevent irreparable damage to important, unique, and significant historic, cultural, and scenic values; fish or wildlife resources; and natural systems or processes; or to protect life and safety from natural hazards (Bureau of Land Management [BLM] Manual 1613 - .02). The Federal Land Policy and Management Act (FLPMA) directs the BLM to give priority to the identification and potential designation of ACECs through the revision of resource management plans.

# 1.2. AREA OF CRITICAL ENVIRONMENTAL CONCERN ANALYSIS AND DESIGNATION PROCESS

The process and procedural requirements for the designation of ACECs through Resource Management Plan (RMP) revisions is established in BLM planning regulations (43 Code of Federal Regulations [CFR] 1610.7-2), which state that ACEC protection and designation shall be considered throughout the planning process. Specific guidance for ACEC analysis and designation includes the nomination of ACECs; the evaluation of nominated ACECs to determine whether they have values, resources, systems, or processes that meet relevance and importance criteria; the development of management prescriptions for potential ACECs; the determination of whether "special management attention" is required to protect the relevance values, resources, systems, or processes; and the incorporation of potential ACECs into plan alternatives. Lands proposed for ACEC designation must meet the relevance and importance criteria, and they must require "special management attention" to protect their relevance values, resources, systems, or processes.

#### 1.2.1. RELEVANCE AND IMPORTANCE CRITERIA

Nominations for ACECs must be evaluated in order to determine whether they meet the required relevance and importance criteria. A nomination must meet one or more of the relevance and importance criteria in order to be considered as a potential ACEC.

Relevance Criteria: An area meets the relevance criteria if it contains one or more of the following:

- a significant historic, cultural, or scenic value (including but not limited to rare or sensitive archeological resources and religious or cultural resources important to Native Americans);
- a fish and wildlife resource (including but not limited to habitat for endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity);
- a natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relic plants or plant communities that are terrestrial, aquatic, or riparian; or rare geological features); and/or
- natural hazards (including but not limited to areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human action may meet the relevance criteria if it is determined through the RMP process that it has become part of a natural process.

For Tres Rios Field Office (TRFO) Land and Resource Management Plan (LRMP) and Final Environmental Impact Statement (FEIS), the evaluation of whether a resource or system meets the relevance criteria for plant, fish, and wildlife species and for plant communities was linked to NatureServe Conservation Status ranks.

NatureServe and its member natural heritage programs have developed a consistent method for evaluating the relative imperilment of both species and ecological communities based on the best available science. These assessments lead to the designation of a conservation status rank. The three

broad categories that factor into these rankings include rarity, trends, and threats. Conservation status rankings include secure (G5), apparently secure (G4), vulnerable (G3), imperiled (G2), critically imperiled (G1), possibly extinct or eliminated (GH), and presumed extinct or eliminated (GX). The Colorado Natural Heritage Program provides a similar statewide conservation status rank (reported as "S" rankings). The BLM has a long history of partnership with NatureServe, and have collaborated on a broad range of projects in such areas as planning, sensitive species inventory and assessments, ecological classification and mapping, and data sharing and technology development.

Nominated ACECs in the TRFO meet the relevance criteria for fish and wildlife resources and for natural systems if they contain plant species, fish species, wildlife species, or plant communities that have a NatureServe Conservation Status rank of G1, G2, S1, or S2, or are federally listed species, proposed or candidate species for federal listing, BLM State Director's sensitive species, or are endemic species to TRFO lands. The conservation concerns and vulnerability of species and plant communities that have a NatureServe Conservation Status rank of G3 or S3 are acknowledged, but because of their relative abundance compared to the other classes of species, G3/S3 or higher ranked species or plant communities do not meet the relevance criteria unless they meet one of the other criteria listed above.

**Importance Criteria:** The value, resource, system, process, or hazard that meets the relevance criteria must have substantial significance to meet the importance criteria. This generally means that the value, resource, system, process, or hazard is characterized by one or more of the following:

- has more than locally significant qualities that give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource:
- has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change;
- has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA;
- has qualities that warrant highlighting in order to satisfy public or management concerns about safety and public welfare; and/or
- poses a significant threat to human life and safety or to property.

#### 1.2.2. SPECIAL MANAGEMENT ATTENTION

"Special management" refers to management prescriptions expressly developed to protect the relevance values, resources, systems, or processes of ACECs from the potential adverse effects of management actions (BLM Manual 1613). The TRFO developed the following criteria to determine if a potential ACEC requires special management attention:

- Threats from ground-disturbing management activities, including those that increase the
  establishment and spread of invasive plants. ACECs with more management activities
  and more lands affected by those management activities have more potential for
  adverse effects to their relevance values, resources, systems, or processes.
- Potential ACECs with species or plant communities that have a G1 or S1 NatureServe Conservation Status rank are highly vulnerability to disturbance and extinction and need special management attention.
- Potential ACECs with three or more occurrences of species and/or plant communities that meet the relevance criteria (which includes those with a NatureServe Conservation Status rank of G1, G2, S1, or S2)
- Potential ACECs with resources that have a biodiversity rank of B1 (see definition for this ranking under Section 1.3 below) have outstanding biodiversity significance worthy of special management attention.
- Significance of the habitat for species or plant communities that meet the relevance criteria, or significance of the archeology resources. ACECs that contain much of the total known habitat or many of the total documented occurrences of species or plant communities that meet the relevance criteria, and ACECs that contain world-renowned archeology resources and/or lands with very high densities of archeology resources

- need special management attention.
- Potential ACECs that occur in remote locations have few roads within and adjacent to
  them or are associated with steep slopes and/or rugged topography are less likely to be
  disturbed by management actions, so they are less likely to need special management
  attention to protect their relevance values, resources, systems, or processes. ACECs
  that are easily accessible by roads and that have relatively flat and gentle topography
  are more likely to be disturbed by management actions so they are more likely to need
  special management attention to protect their relevance values, resources, systems, or
  processes.
- Potential ACECs that occur in the Dolores River Canyon wilderness study area (WSA), the Dolores River Canyon area, or other special designations receive additional management prescriptions that protect relevance values, including NSO stipulations, so they are less likely to need special management attention.

#### 1.3. SUMMARY OF FINDINGS FOR NOMINATED ACECS

In the Draft LRMP, 22 sites were evaluated by the LRMP interdisciplinary planning team to determine whether they meet the relevance and importance criteria as set forth in BLM Manual 1613 and should be considered for ACEC designation (see Table U.1 and Figure U-1). Eight sites were jointly nominated by the San Juan Citizens Alliance and Center for Native Ecosystems, and 14 were nominated by the LRMP interdisciplinary planning team. Most of the nominated ACECs are associated with potential conservation areas (PCAs) that were developed by the Colorado Natural Heritage Program. A PCA represents the primary area needed to support the long-term survival of a rare species or plant community within it. PCAs were nominated for consideration as ACECs through an assessment conducted for the TRFO by the Nature Conservancy called *San Juan Planning for Biodiversity Model Project Phase 1 and 2* (Kram et al. 2005 and Oliver et al. 2006). Colorado Natural Heritage Program PCA Biodiversity Significance Ranks were used to identify which PCAs had the highest levels of biodiversity significance.

The Colorado Natural Heritage Program has developed a consistent method for evaluating biodiversity significance of PCAs based on the best available science. These assessments lead to the designation of a biodiversity significance rank. The three broad categories that factor into these rankings include size, quality, and landscape integrity. Biodiversity significance rankings include general biodiversity interest (B5), moderate biodiversity significance (B4), high biodiversity significance (B3), very high biodiversity significance (B2), and outstanding biodiversity significance (B1).

BLM Manual 1613, which provides direction for the designation and management of ACECs, states, "All areas which meet the relevance and importance criteria must be identified as potential ACECs and fully considered for designation and management in resource management planning." Of the 22 sites evaluated for the LRMP, 19 sites were found to meet both the relevance and importance criteria, as shown in Table U.1.

Table U.1: Areas Nominated for Area of Critical Environmental Concern Designation

Area	Meets Relevance and Importance Criteria?	Considered in LRMP Alternatives for ACEC Designation?
Anasazi Culture <sup>1</sup>	X	X
Cement Creek	X	
Cinnamon Pass	X	
Coyote Wash	X	
Disappointment Valley	X	
Dry Creek Basin	X	
Dolores River Canyon: Slick Rock to Bedrock	X	
Grassy Hills	X	X
Gypsum Valley <sup>2</sup>	X	X
Horse Range Mesa	_	_
Lake Como	X	

Area	Meets Relevance and Importance Criteria?	Considered in LRMP Alternatives for ACEC Designation?
McIntyre Canyon	X	
Mesa Verde Entrance	X	
Muleshoe Bench	X	
Northdale	X	
Picayune Gulch		
Silvey's Pocket	X	X
Slick Rock <sup>3</sup>	X	
Snaggletooth	X	
Spring Creek	X	

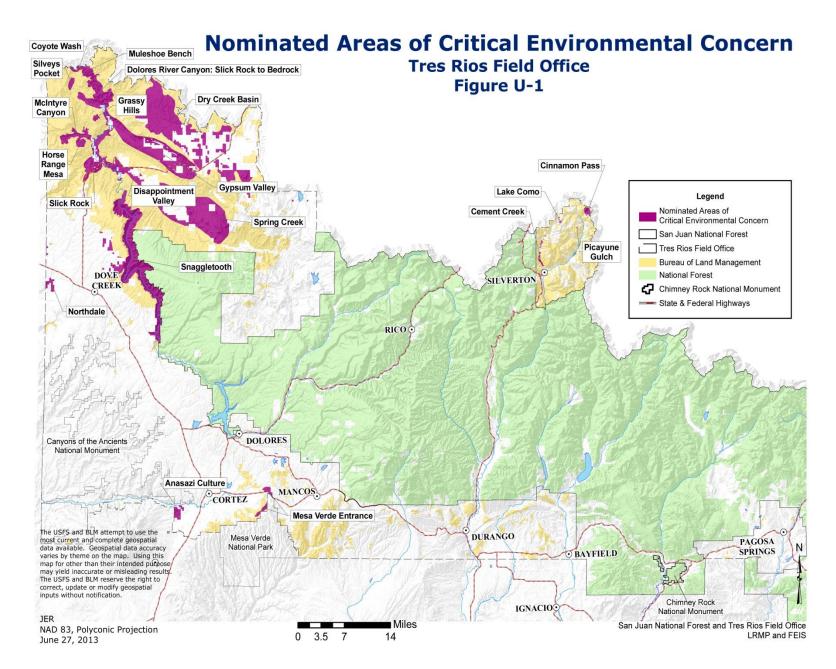
Anasazi Culture is the new name for the area identified as Mud Springs in the Draft LRMP/EIS.

Only four proposed ACECs were brought forward in the Draft LRMP alternatives and listed in the *Federal Register* Notice, dated December 14, 2007. In the Proposed LRMP, the Anasazi Culture and Gypsum Valley areas are analyzed for ACEC designation in Alternatives B and C, while Grassy Hills and Silvey's Pocket are only analyzed in Alternative C. The remaining 15 areas that meet both relevance and importance criteria were not included in the alternatives to be analyzed as potential ACECs. To correct this oversight, the BLM will consider these potential ACECs in a future plan amendment.

In the interim, the relevance and importance values identified within these 15 areas are largely protected through specific direction in the LRMP. While not exhaustive, a description of management actions, allocations, oil and gas leasing stipulations and other prescriptions proposed in the LRMP under Alternative B that will provide protection for the relevance and importance criteria in these 15 areas is included with evaluations below. The protective actions listed are principally those that specifically address the relevance and importance values of each nominated area; there are other LRMP management prescriptions that provide additional protection but may not be listed below because of their broad application across the planning area. In addition, protection of identified relevance and importance values will be considered during project-level analysis of any management actions or project proposals.

<sup>&</sup>lt;sup>2</sup> Big Gypsum Valley and Little Gypsum Valley, as identified in the Draft LRMP /EIS, have been combined into one area known as Gypsum Valley.

<sup>&</sup>lt;sup>3</sup> The Slick Rock area also includes the Slick Rock Hill nominated ACEC.



# 1.4. EVALUATIONS OF NOMINATED ACECS

#### Anasazi Culture

Nominator Nominator	Existing ACEC; re-nominated by LRMP interdisciplinary planning team
Location	Montezuma County about 1 mile west of Cortez
Description	This ACEC contains BLM lands within the Mud Springs PCA. In 1985, the San Juan/San Miguel RMP designated 156,000 acres of BLM land as the Anasazi Culture Multiple Use Area ACEC due to significant cultural resources. In 2000, President Clinton issued a proclamation designating most of this ACEC as the Canyons of the Ancients National Monument. The Anasazi Culture potential ACEC, which is currently an ACEC under the name Mud Springs/Remnant Anasazi ACEC, contains what is left of the original Anasazi Culture Multiple Use Area ACEC, comprising approximately 1,100 acres. Existing ACECs are subject to reconsideration as ACECs when resource management plans are revised (BLM Manual 161321A1)
Relevance criteria	This site meets the relevance criteria because it contains significant cultural values in the form of rare and sensitive archeological, religious, and cultural resources important to Native Americans. This site also meets the relevance criteria because it contains S2 ranked short-stem penstemon ( <i>Penstemon breviculus</i> ) and G2 ranked Naturita milkvetch ( <i>Astragalus naturitensis</i> ), which are natural systems in the form of rare (G2 and S2 ranked) terrestrial plant species. Naturita milkvetch is a BLM State Director's sensitive species and therefore qualifies as a relevance value under the natural process or system criteria.
Importance criteria	The rare and sensitive archeological, religious, and cultural resources meet the importance criteria because they have more than locally significant qualities which give them special worth, consequence, meaning, and distinctiveness, and because they have qualities that make them fragile, rare, irreplaceable, unique, and vulnerable to adverse change. Short-stem penstemon and Naturita milkvetch meet the importance criteria because they have more than locally significant qualities due to their rarity (G2 and S2 ranks) which gives them special worth and cause for concern, and because their rarity gives them qualities that make them sensitive, rare, and vulnerable to adverse change. Naturita milkvetch also meets the importance criteria because of its designation on the BLM State Director's sensitive species list which gives it special worth, meaning, distinctiveness, and cause for concern, and which recognizes it as warranting protection in order to carry out the mandates of FLPMA.
Determination	The Anasazi Culture nominated ACEC meets both the relevance and importance criteria so it was identified as a potential ACEC and further analyzed in the planning process. Special management attention is expressly required to protect this potential ACEC and its relevance values and systems because this area has the highest density of Ancestral Puebloan architectural sites on the TRFO, and because it occurs in a location where threats (particularly recreational activities) to its cultural values and rare plants are very likely. The Anasazi Culture nominated ACEC is considered for ACEC designation in Alternatives B and C of the LRMP.

#### **Cement Creek**

Nominator	LRMP interdisciplinary planning team
Location	San Juan County, northwest of the town of Silverton
Description	This nominated ACEC includes all BLM lands within the Cement Creek Iron Fen PCA. Colorado's iron fens are unique because their water pH is similar to acid poor fens, while the ionic strength of their water is similar to rich fens. Elevation is 10,200 to 11,300 feet and size is about 455 acres.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Engelmann spruce/resin birch/water sedge/sphagnum ( <i>Picea engelmannii/Betula glandulosa/Carex aquatilis/Sphagnum angustifolium</i> ) woodlands, which is a natural system in the form of a rare and relic terrestrial plant community.
Importance criteria	The Engelmann spruce/resin birch/water sedge/sphagnum plant community meets the importance criteria because it is has more than locally significant qualities due to its rarity (G2 rank) and relic status (fens take thousands of years to develop), which gives it special worth,

Determination	distinctiveness, and cause for concern; and this plant community meets the importance criteria because its rarity and relic status gives it qualities that make it irreplaceable, unique, and vulnerable to adverse change.  The Cement Creek nominated ACEC meets both the relevance and importance criteria. The determination regarding its designation is "to be determined" based on the plan amendment.
Proposed 1	LRMP Direction to Protect Relevance and Importance Values within Cement Creek
Engelmann spruce/ resin birch/ water sedge/ sphagnum Woodlands	<ul> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2 NatureServe plant community conservation status ranks, including wild privet (Forestiera pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis) woodlands, in order to maintain the ecological integrity of those rare plant communities.</li> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive plants.</li> </ul>

#### **Cinnamon Pass**

Nominator	LRMP interdisciplinary planning team
Location	San Juan County, about 10 air miles northeast of Silverton
Description	This nominated ACEC contains alpine BLM lands within the Cinnamon Pass PCA. Size is
	about 562 acres of BLM land and elevation is 12,000 to 13,328 feet.
Relevance criteria	This site meets the relevance criteria because it contains S1 ranked native sedge (Carex
	<i>vernacula</i> ) herbaceous vegetation which is a natural system in the form of a rare riparian plant
	community.
Importance	Native sedge herbaceous vegetation meets the importance criteria because it has more than
criteria	locally significant qualities due to its rarity (S1 rank) which gives it special worth,
	distinctiveness, and cause for concern, and this plant community meets the importance criteria
	because its rarity gives it qualities that make it unique, rare, and vulnerable to adverse change.
Determination	The Cinnamon Pass nominated ACEC meets both the relevance and importance criteria. The
	determination regarding its designation is "to be determined" based on the plan amendment.
Proposed I	RMP Direction to Protect Relevance and Importance Values within Cinnamon Pass
Common to all	NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.
values	CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.
Native sedge	• 2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in
herbaceous	riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2
vegetation	NatureServe plant community conservation status ranks, including wild privet (Forestiera
	pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis)
	woodlands, in order to maintain the ecological integrity of those rare plant communities.

# **Coyote Wash**

Nominator	LRMP interdisciplinary planning team
Location	Southwest Montrose County, about 9.5 air miles south of Paradox
Description	This nominated ACEC contains BLM lands within the Coyote Wash PCA. Coyote Wash is a steep-sided canyon that joins the Dolores River Canyon between Slick Rock and Bedrock. It is 840 acres of BLM land and occurs at 5,100 to 5,800 feet. This site is in the Dolores River Canyon WSA.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Kachina daisy ( <i>Erigeron kachinensis</i> ), S1 ranked Eastwood's monkeyflower ( <i>Mimulus eastwoodiae</i> ), and S2 ranked stream orchid ( <i>Epipactis gigantea</i> ), which are natural systems in the form of rare terrestrial plant species. This site also meets the relevance criteria because it contains Kachina daisy and Eastwood's monkeyflower and stream orchid, which are natural systems that are on the BLM

Importance criteria	State Director's sensitive species list. This site also meets the relevance criteria because it contains S2 ranked spotted bat (Euderma maculatum) (and its habitat), which is a rare (S2 rank) wildlife resource that is on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains S2 ranked needle-and-thread (Hesperostipa comata) Great Basin herbaceous vegetation which is a natural system in the form of a rare terrestrial plant community.  Kachina daisy, Eastwood's monkeyflower, stream orchid, and spotted bat meet the importance criteria because they have more than locally significant qualities due to their rarity (G2, S1, S2 ranks), which gives them special worth and cause for concern, and these species meet the importance criteria because their rarity gives them qualities that make them sensitive, unique, rare, and vulnerable to adverse change. Kachina daisy, Eastwood's monkeyflower, stream orchid, and spotted bat also meet the importance criteria because they have more than locally significant qualities due to their designation on the BLM State Director's sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. Kachina daisy, Eastwood's monkeyflower, stream orchid, and spotted bat also meet the importance criteria because of their designation as high-priority species in the San Juan Biodiversity Model which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. Needle-and-thread Great Basin herbaceous vegetation meets the importance criteria because it has more than locally significant qualities due to its rarity (S2 rank), which gives it special worth and cause for concern, and this plant community meets the importance criteria
	because its rarity gives it qualities that make it sensitive, unique, rare, and vulnerable to adverse
Determination	change.  The Coyote Wash nominated ACEC meets both the relevance and importance criteria. The
Determination	determination regarding its designation is "to be determined" based on the plan amendment.
Proposed	LRMP Direction to Protect Relevance and Importance Values within Coyote Wash
Common to all	Nominated ACEC is within Dolores River WSA.
values	• 2.2.73 Agency actions should be designed to avoid or minimize impacts in canyon
	escarpments, unless the activity is designed to maintain or restore the composition,
	structure, or function of the terrestrial ecosystems within those escarpments.
Kachina daisy	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive plants.</li> </ul>
Stream orchid  Eastwood	<ul> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are</li> </ul>
monkeyflower	<ul> <li>2.2.67 Projects or activities occurring in tens, wetlands, or nanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> </ul>

	CSU stipulation: Colorado BLM State Director's sensitive plants and R2 Regional
	Forester's sensitive plants.
Spotted bat and its habitat	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.3.38 Bats: Human access at occupied caves or abandoned mines will be restricted as necessary during the following periods to maintain essential life cycle processes:         <ul> <li>Maternity sites - April 15 through September 1</li> <li>Swarming sites - August 15 through October 15 (30 minutes before sunset to 30 minutes after sunrise)</li> <li>Winter hibernacula - October 15 through May</li> </ul> </li> <li>NSO stipulation: Major river corridors.</li> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>NSO stipulation: Bats.</li> <li>Lease notice: Bats.</li> </ul>
Needle-and- thread Great	• 3.23.9 Management activities and recreational use should avoid or minimize impacts to rare or unique plant communities.
Basin herbaceous vegetation	

**Disappointment Valley** 

Disappointment Valley			
Nominator	San Juan Citizens Alliance, Center for Native Ecosystems		
Location	San Miguel County about 20 miles southwest of Naturita		
Description	This nominated ACEC contains BLM lands within the Disappointment Valley Northwest PCA.		
	Elevation is 5,600 to 5,800 feet and size is about 2,720 acres of BLM land.		
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Gypsum Valley cat-eye		
	(Cryptantha gypsophila) and G2 ranked Naturita milkvetch, which are natural systems in the form		
	of rare (G2 ranks) terrestrial plant species. It also meets the relevance criteria because Gypsum		
	Valley cat-eye and Naturita milkvetch are natural systems that are on the BLM State Director's		
	sensitive species list.		
Importance	Gypsum Valley cat-eye and Naturita milkvetch meet the importance criteria because they have		
criteria	more than locally significant qualities due to their rarity (G2 ranks), which gives them special		
	worth and cause for concern, and these species meet the importance criteria because they have		
	more than locally significant qualities due to their designation on the BLM State Director's		
	sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for		
	concern, and which recognizes them as warranting protection in order to carry out the mandates		
	of FLPMA. Gypsum Valley cat-eye and Naturita milkvetch also meet the importance criteria		
	because of their designation as high-priority species in the San Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and cause for concern, and which		
Determination	recognizes them as warranting protection in order to carry out the mandates of FLPMA.  The Disappointment Valley nominated ACEC meets both the relevance and importance criteria.		
Determination	The determination regarding its designation is "to be determined" based on the plan		
	amendment.		
Proposed I RM	IP Direction to Protect Relevance and Importance Values within Disappointment Valley		
Common to all	CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's		
values	sensitive plants.		
varaes			
C	CSC. Lands with clotogram son crasts.		
Gypsum Valley	• 2.2.68 Projects or activities that occur in shale and gypsum soils that are occupied by		
cat-eye	special status plant species must be designed to maintain the soil characteristics necessary to support and sustain those species.		
	2.2.79 Management activities in areas with biological soil crusts should be designed to minimize adverse impacts to the soil crusts.		
	1		
	• 2.2.80 Ground disturbance should be limited or otherwise mitigated on gypsum soils and		

	organic soils (histosols) in order to protect the ecological integrity of these rare and unique soils and the rare plants associated with these soils.  • CSU: Lands with gypsum soils.
Naturita	See protections common to all values.
milkvetch	

**Dolores River Canyon** 

Dolores River Canyon		
Nominator	LRMP interdisciplinary planning team	
Location	San Miguel County and southwestern Montrose County between Slick Rock and Bedrock	
Description	This nominated ACEC contains BLM lands within the Dolores River Canyon – Slick Rock to Bedrock PCA. It includes Dolores River Canyon lands for approximately 50 miles. Most of this area is roadless and accessible only by raft, canoe, or kayak. This site is included in the Dolores River Canyon area (see Volume II, Section 3.23) and part of it occurs in the Dolores River Canyon WSA. Elevation is 4,966 to 6,200 feet and size is 18,083 acres of BLM land.	
Relevance criteria	This site meets the relevance criteria because it contains G1 ranked wild privet shrublands, which is a natural system in the form of a rare terrestrial plant community. This site also meets the relevance criteria because it contains G2 ranked Mancos columbine ( <i>Aquilegia micrantha</i> ) - Eastwood's monkeyflower herbaceous vegetation, which is a natural system in the form of a rare terrestrial plant community. This site also meets the relevance criteria because it contains G2 ranked Naturita milkvetch, and S1 ranked Eastwood's monkeyflower and G2 ranked stream orchid <i>Epipactis gigantea</i> ),, which are natural systems in the form of rare (G2 and S1 ranks) terrestrial plant species. This site also meets the relevance criteria because Naturita milkvetch and Eastwood's monkeyflower are natural systems that are on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains canyon tree frog ( <i>Hyla arenicolor</i> ) and G2 ranked peregrine falcon ( <i>Falco peregrinus anatum</i> ) (and their habitat), which are wildlife resources that are on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains flannel-mouthed sucker ( <i>Catostomas latipinnis</i> ) (and its habitat), which is a fish resource that is on the BLM State Director's sensitive species list, and because the site contains habitat for G2 ranked roundtail chub ( <i>Gila robusta</i> ), which is a fish resource that are on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains S2 ranked Yuma skipper ( <i>Ochlodes yuma</i> ) (and its habitat), which is a rare wildlife resource. This site also meets the relevance criteria because of its significant scenic value in the form of diverse and extreme topography, and diverse and colorful sedimentary geology.	
Importance criteria	The wild privet Shrublands, Mancos columbine - Eastwood's monkeyflower herbaceous vegetation, Naturita milkvetch, Eastwood's monkeyflower, stream orchid, Yuma skipper, and peregrine falcon meet the importance criteria due to their rarity (G1, G2, S1, S2 ranks), which gives them special worth and cause for concern, and these fish and wildlife resources and natural systems meet the importance criteria because their rarity gives them qualities that make them sensitive, unique, and vulnerable to adverse change. Naturita milkvetch, Eastwood's monkeyflower, canyon tree frog, peregrine falcon, and flannelmouth sucker also meet the importance criteria because they have more than locally significant qualities due to their designation on the BLM State Director's sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. Naturita milkvetch, Eastwood's monkeyflower, stream orchid, canyon tree frog, flannelmouth sucker, peregrine falcon, wild privet, and Mancos milkvetch ( <i>Astragalus humillimus</i> ) - Eastwood's monkeyflower herbaceous vegetation also meet the importance criteria because of their designation as high-priority species or plant communities in the San Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. The scenic value also meets the importance criteria because it has more than locally significant qualities due to the large size and extreme depth of the canyon and the diverse colorful geology of the canyon, which gives it special	
Determination	worth and distinctiveness.  The Dolores River Canyon nominated ACEC meets both the relevance and importance criteria. The determination regarding its designation is "to be determined" based on the plan amendment.	

	RMP Direction to Protect Relevance and Importance Values within Dolores River Canyon
Common to all values	<ul> <li>Within Dolores River Canyon Unique Area.</li> <li>2.2.73 Agency actions should be designed to avoid or minimize impacts in canyon escarpments, unless the activity is designed to maintain or restore the composition, structure, or function of the terrestrial ecosystems within those escarpments.</li> <li>NSO: Major river corridors.</li> <li>NSO: Dolores River Canyon.</li> </ul>
Wild privet shrublands	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant community conservation status ranks in order to maintain the ecological integrity of those rare plant communities.</li> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2 NatureServe plant community conservation status ranks, including wild privet (Forestiera pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis) woodlands, in order to maintain the ecological integrity of those rare plant communities.</li> <li>3.23.9 Management activities and recreational use should avoid or minimize impacts to rare or unique plant communities.</li> <li>NSO: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive</li> </ul>
Mancos columbine- Eastwood's monkeyflower herbaceous vegetation	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant community conservation status ranks in order to maintain the ecological integrity of those rare plant communities.</li> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2 NatureServe plant community conservation status ranks, including wild privet shrublands and boxelder/river birch woodlands, in order to maintain the ecological integrity of those rare plant communities.</li> <li>3.23.9 Management activities and recreational use should avoid or minimize impacts to rare or unique plant communities.</li> <li>NSO: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive</li> </ul>
Naturita	<ul> <li>plants.</li> <li>CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive</li> </ul>
milkvetch	plants.

Stream orchid	• 2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and
Sueam orcina	• 2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized
	travel, road construction, water pumping, and peat removal) must not occur.
	<ul> <li>NSO: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Perennial streams, water bodies, riparian areas, and fens.</li> </ul>
Eastwood's	
monkeyflower	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
monkeynower	occupied by special status plant species must be designed to maintain the hydrologic
	systems necessary to support and sustain those species.
	• 2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant
	community conservation status ranks in order to maintain the ecological integrity of those
	rare plant communities.
	<ul> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and</li> </ul>
	hanging gardens from management activities in or adjacent to them (including motorized
	travel, road construction, water pumping, and peat removal) must not occur.
	• 2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in
	riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2
	NatureServe plant community conservation status ranks, including wild privet ( <i>Forestiera</i>
	pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis)
	woodlands, in order to maintain the ecological integrity of those rare plant communities.
	• 3.23.9 Management activities and recreational use should avoid or minimize impacts to
	rare or unique plant communities.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
	• CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive
	plants.
Canyon tree frog	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
and its habitat	occupied by special status plant species must be designed to maintain the hydrologic
	systems necessary to support and sustain those species.
	• 2.3.50 In order to determine site occupation, pre-implementation surveys may be required
	for projects occurring in habitats that may support populations of sensitive species and
	species listed or proposed under the ESA, as determined by an agency biologist.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
70 1 61	CSU: Perennial streams, water bodies, riparian areas, and fens.
Peregrine falcon	• 2.3.35 Protection of nests from new structures and human encroachment (see LRMP Table
and its habitat	2.3.2).
	NSO stipulation: Perennial streams, water bodies, riparian areas, and fens
Flannelmouth	CSU stipulation: Perennial streams, water bodies, riparian areas, and fens
sucker and its	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic
habitat	systems necessary to support and sustain those species.
naortat	<ul> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> </ul>
	<ul> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> </ul>
Roundtail chub	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are</li> </ul>
habitat	occupied by special status plant species must be designed to maintain the hydrologic
11401141	systems necessary to support and sustain those species.
	<ul> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> </ul>
	CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.
Yuma skipper	2.3.43 Butterflies: Management actions that could adversely impact occupied habitat used by
and its habitat	special status butterfly species for reproduction must be designed to sustain host plant
	species.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
Significant scenic	NSO stipulation: High scenic integrity objective and Visual Resource Management (VRM)
	, and the state of

value	Class II areas.
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**Dry Creek Basin** 

Dry Creek Basin	
Nominator	San Juan Citizens Alliance, Center for Native Ecosystems (nominated under name "San Miguel Basin")
Location	San Miguel County, Colorado
Description	This nominated ACEC contains BLM lands within the San Miguel Basin PCA. Elevation is about 5,300 to 6,700 feet. This nominated ACEC contains the Dry Creek Basin subpopulation of the San Miguel population of the Gunnison sage-grouse ( <i>Centrocercus minimus</i> ), which is a species that is restricted to a small area in western Colorado and eastern Utah. Its range has diminished due to the loss, fragmentation, and degradation of sagebrush shrublands caused by agricultural development, mining and energy development, reservoirs, power lines, roads, urban development, and treatments to control sagebrush (including burning, mechanical methods, and herbicides). Livestock overgrazing, the spread of non-native grasses and forbs, and the accelerating increase in the size and extent of wildfires due to the widespread invasion by cheatgrass (Braun 1998) have also affected habitat quality. Management of the San Miguel Basin population of the Gunnison sagegrouse is a cooperative effort with the BLM, Colorado Parks and Wildlife (CPW), State Wildlife Areas, Natural Resources Conservation Service, and private landowners, and management is
	guided by the Gunnison Sage-grouse Rangewide Conservation Plan.
Relevance criteria	This site meets the relevance criteria because it contains G1 ranked Gunnison sage-grouse (and its habitat), which is a rare (G1 rank) wildlife resource, and this site meets the relevance criteria because the Gunnison sage-grouse is a wildlife resource that is on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains G2 ranked Gypsum Valley cat-eye, which is a natural system in the form of a rare (G2 rank) terrestrial plant species. This site also meets the relevance criteria because Gypsum Valley cat-eye is a natural system that is on the BLM State Director's sensitive species list.
Importance criteria	Gunnison sage-grouse meet the importance criteria because its rarity (G1 rank) gives it more
	than locally significant qualities, which give it special worth, distinctiveness, and cause for concern, and it meets the importance criteria because its rarity gives it qualities or circumstances that make it sensitive, rare, unique, threatened, and vulnerable to adverse change. Gunnison sage-grouse and Gypsum Valley cat-eye also meet the importance criteria because of their designation on the BLM State Director's sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. Gunnison sage-grouse and Gypsum Valley cat-eye also meet the importance criteria because of their designation as high-priority species in the San Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA.
Determination	The Dry Creek Basin nominated ACEC meets both the relevance and importance criteria
	(Gunnison sage-grouse and its habitat). The determination regarding its designation is "to be determined" based on the plan amendment.
	RMP Direction to Protect Relevance and Importance Values within Dry Creek Basin
Gunnison sage- grouse	<ul> <li>2.3.45 Gunnison sage-grouse: Management activities must not occur from March 1 to June 30 within occupied habitat suitable for nesting to allow for breeding and December 1 to March 15 for known winter habitat.</li> <li>2.3.46 Gunnison sage-grouse: New structural improvements or surface disturbance must not occur within known winter concentration area or within a 0.6-mile radius of known Gunnison sage-grouse leks.</li> <li>2.3.47 Gunnison sage-grouse: In occupied habitat fuels treatments must be designed and implemented with an emphasis on protecting and enhancing existing sagebrush ecosystems</li> <li>2.3.48 Gunnison sage-grouse: Invasive vegetation must be monitored and controlled post-treatment.</li> <li>2.3.70 Structures in sage-grouse habitat should be constructed to limit risk of collision and predation.</li> </ul>

	noise levels that negatively impact sage-grouse leks during the active lek season (March 1
1	to June 30) based on best available science.
	2.3.72 Projects in occupied Gunnison sage-grouse habitat should be designed to mitigate or avoid the direct or indirect loss of habitat necessary for maintenance of the local population or reduce to acceptable levels the direct or indirect loss of important habitat necessary for sustainable local populations. Projects will incorporate special reclamation measures or design features that accelerate recovery and/or re-establishment of affected sage-grouse habitat as much as possible.
	<ul> <li>2.3.73 Applicable BMPs should be applied to all mineral proposals as Conditions of</li> </ul>
	Approval within occupied sage-grouse habitat to provide for adequate effective habitat and breeding, nesting, and wintering habitat.
	• 2.3.74 Remote methodologies for monitoring, transporting fluids to centralized collection tanks, etc., should be utilized to minimize human disturbance in Gunnison sage-grouse habitat.
	• 2.3.75 Fuels treatments should be designed to meet strategic protection of identified occupied sage-grouse habitat.
	<ul> <li>2.3.76 Use of native seeds should be used for revegetation following fuels management treatment based on availability, adaptation (site potential), and probability of success (Richards et al. 1998). Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet sage-grouse habitat objectives</li> <li>2.3.77 Within occupied Gunnison sage-grouse critical habitat the Rangewide Conservation Plan grazing guidelines should be incorporated when appropriate.</li> </ul>
	• 2.3.78 Within occupied habitat, grazing in treatment areas should be deferred for 2 growing season after treatment, unless needed for seedbed preparation or desired understory and overstory are established.
	• 2.3.79 When developing or modifying water developments, BMPs (see Appendix N) should be used to mitigate potential impacts from West Nile virus on sage-grouse within occupied habitat.
	NSO stipulation: Gunnison sage-grouse occupied critical habitat.
	CSU stipulation: Gunnison sage-grouse occupied critical habitat.
	CSU stipulation: Gunnison sage-grouse proposed unoccupied critical habitat.
	CSU stipulation: Gunnison sage-grouse noise restrictions, occupied and unoccupied critical habitat.
Gypsum Valley cat-eye	• CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive plants.
	CSU stipulation: Lands with gypsum soils.
	CSU stipulation: Lands with 25% to 35% slopes and lands with shale soils.

#### **Grassy Hills**

Nominator	LRMP interdisciplinary planning team
Location	San Miguel County, Colorado
Description	This nominated ACEC includes all BLM lands within the Grassy Hills PCA. It is located on a
	sandstone bench southwest of the confluence of Gypsum Creek and the Dolores River.
	Elevation is 6,700 feet and size is 420 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains S2 ranked Needle-and-thread Great
	Basin herbaceous vegetation, which is a natural system in the form of a rare terrestrial plant
	community
Importance	Needle-and-thread Great Basin herbaceous vegetation meets the importance criteria because it
criteria	has more than locally significant qualities due to its rarity (S2 rank), which gives it special
	worth and cause for concern, and this plant community meets the importance criteria because
	its rarity gives it qualities that make it rare and vulnerable to adverse change.
Determination	The Grassy Hills nominated ACEC meets both the relevance and importance criteria, but it may
	not expressly require additional "special management attention" because this potential ACEC

and its relevance system can be adequately protected from management actions and threats by
the general LRMP management prescriptions. This potential ACEC is considered for ACEC
designation in Alternative C.

**Gypsum Valley** 

Gypsum Valley	
Nominator	San Juan Citizens Alliance, Center for Native Ecosystems (nominated as two separate areas:
T	Big Gypsum Valley and Little Gypsum Valley)
Location	San Miguel County about 14 miles southwest of Naturita, Colorado
Description	The Gypsum Valley nominated ACEC includes all BLM lands within the Big and Little
	Gypsum Valley PCAs. The Big Gypsum Valley and Little Gypsum Valley nominated ACECs
	were combined due to their close proximity and because of the similar relevance values they
	contain (BLM Manual 161322A5). This nominated ACEC contains gypsum outcrops of the
	Hermosa geologic formation that are the habitat of rare plants. Elevation is 6,100 to 6,500 feet
<b>D</b> 1	and size is about 16,872 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Gypsum Valley cat-eye, G1
	ranked Lecanora gypsicola, S1 ranked nodule cracked lichen (Acarospora nodulosa var.
	nodulosa), S2 ranked flex-stemmed mariposa lily (Calochortus uniflorus), S1 ranked Nealley's
	dropseed (Sporobolus nealleyi), G2 ranked Naturita milkvetch, and S2 ranked short-stem
	penstemon, which are all natural systems in the form of rare terrestrial plant species. This site
	also meets the relevance criteria because Gypsum Valley cat-eye and Naturita milkvetch are
	natural systems that are on the BLM State Director's sensitive species list. This site also meets
	the relevance criteria because it contains unique gypsum outcrops, which are a natural system
_	in the form of a rare geological feature.
Importance	Gypsum Valley cat-eye, <i>Lecanora gypsicola</i> , nodule cracked lichen, flex-stemmed mariposa
criteria	lily, Naturita milkvetch, Short-stem penstemon, and Nealley's dropseed meet the importance
	criteria because their rarity (G1, G2, S1, or S2 NatureServe Conservation Status ranks) gives
	them more than locally significant qualities, which gives them special worth and cause for
	concern (they are at a high risk of global extinction or state extirpation because they have such
	few occurrences), and these species meet the importance criteria because their rarity gives them
	qualities that make them sensitive, unique, rare, and vulnerable to adverse change. Gypsum
	Valley cat-eye also meets the importance criteria because a large portion of its entire range and
	most of the documented occurrences of the species are on the TRFO, which gives it more than locally significant qualities that are of special worth and cause for concern. Gypsum Valley cat-
	eye and Naturita milkvetch also meet the importance criteria because of their designation on the
	BLM State Director's sensitive species lists, which gives them special worth, meaning,
	distinctiveness, and cause for concern, and which recognizes them as warranting protection in
	order to carry out the mandates of FLPMA. Gypsum Valley cat-eye, <i>Lecanora gypsicola</i> ,
	nodule cracked lichen, Naturita milkvetch, short-stem penstemon, and flex-stemmed mariposa
	lily also meet the importance criteria because of their designation as high-priority species in the
	San Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and
	cause for concern, and which recognizes them as warranting protection in order to carry out the
	mandates of FLPMA. The gypsum outcrops also meet the importance criteria because they
	have qualities or circumstances that make them sensitive, rare, unique, and vulnerable to
	adverse change.
Determination	The Gypsum Valley nominated ACEC meets both the relevance and importance criteria so it was
Determination	identified as a potential ACEC and further analyzed in the BLM planning process. In addition to the
	general management prescriptions, special management attention (in the form of additional
	management prescriptions specific to this ACEC, as described above) is needed to protect the
	outstanding and vulnerable relevance values within this ACEC because this ACEC is subject to
	many ground-disturbing management activities (including off-road-vehicle use, livestock grazing,
	and oil and gas development) that could disturb many acres; because the relevance values are subject
	to competition from invasive plants (brought in on the extensive road network within this ACEC),
	which could quickly become established on the many acres affected by the many ground-disturbing
	management activities associated with this ACEC; because this ACEC contains three occurrences of
	a G1 ranked species ( <i>Lecanora gypsicola</i> ), five occurrences of a G2 ranked species Gypsum Valley
	27 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

cat-eye), three occurrences of an S1 ranked species (nodule cracked lichen Acarospora nodulosa
var. nodulosa, and an occurrence of S1 ranked Nealley's dropseed, all of which are highly
vulnerable to disturbance and extinction; because of the significance of the habitat within this ACEC
since the ACEC contains such a large portion of the entire range, much of the total known habitat,
and many of the total documented occurrences of Gypsum Valley cat-eye, which means that
management actions within this ACEC could have a significant effect on the long-term viability of
that species; because the gypsum soils habitat for Gypsum Valley cat-eye, and the gypsum rim
lichen is easily disturbed and highly erosive; because this site has a biodiversity rank of B1 for
outstanding biodiversity significance; and because this area is easily accessible (highly roaded and
relatively flat topography). This potential ACEC is considered for ACEC designation in
Alternatives B and C.

# **Horse Range Mesa**

Nominator	LRMP interdisciplinary planning team
Location	San Miguel County, Colorado
Description	This nominated ACEC occurs in the Morrison geologic formation. Brigham Young University
	excavated vertebrae of a Camasaurus dinosaur specimen from this site and wrote a report on its
	findings. Elevation is 6,700 feet and size is 160 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains a Camasaurus dinosaur specimen,
	which is a natural system in the form of a rare geological feature.
Importance	The Camasaurus dinosaur specimen does not meet the importance criteria because according to
criteria	the associated BYU report, the dinosaur specimen does not have more than locally significant
	qualities, which give it special worth, consequence, meaning, distinctiveness, or cause for
	concern, and the dinosaur specimen does not have qualities or circumstances that make it
	fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable
	to adverse change.
Determination	The Horse Range Mesa nominated ACEC meets the relevance criteria but does not meet the
	importance criteria so it was not identified as a potential ACEC.

#### Lake Como

Nominator	LRMP interdisciplinary planning team
Location	San Juan County, about 7 air miles north-northeast of Silverton
Description	This nominated ACEC contains BLM lands within the Lake Como PCA. It is a turquoise lake
	at the headwaters of the Uncompangre River. Elevation is 12,000 to 13,447 feet and size is 100
	acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Rocky Mountain draba ( <i>Draba</i>
	graminea), which is a natural system in the form of a rare (G2 rank) terrestrial plant species.
Importance	Rocky Mountain draba meets the importance criteria because it has more than locally
criteria	significant qualities due to its rarity (G2 rank), which gives it special worth and cause for
	concern, and Rocky Mountain draba meets the importance criteria because its rarity gives it
	qualities that make it sensitive, unique, rare, and vulnerable to adverse change. Rocky
	Mountain draba also meets the importance criteria because of its designation as a high-priority
	species in the San Juan Biodiversity Model, which gives it special worth, meaning,
	distinctiveness, and cause for concern, and which recognizes it as warranting protection in
	order to carry out the mandates of FLPMA.
Determination	The Lake Como nominated ACEC meets both the relevance and importance criteria. The
	determination regarding its designation is "to be determined" based on the plan amendment.
Proposed LRMP Direction to Protect Relevance and Importance Values within Lake Como	
Rocky Mountain	Protection of this value will be considered during project-level analysis of any management
draba	actions or project proposals.

#### **McIntyre Canyon**

Nominator	San Juan Citizens Alliance, Center for Native Ecosystems
Location	5 air miles northwest of Slick Rock, in northwest San Miguel County
Description	This nominated ACEC contains BLM lands within the McIntyre Canyon PCA. McIntyre

	Canyon is connected to the Dolores River Canyon. Elevation is 5,400 to 6,200 feet and size is		
	2,980 acres of BLM land.		
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Naturita milkvetch and S1 ranked Eastwood's monkeyflower, which are natural systems in the form of rare (G2 and S1 ranks) terrestrial plant species. This site also meets the relevance criteria because Naturita milkvetch and Eastwood's monkeyflower are natural systems that are on the BLM State Director's sensitive species list. This site also meets the relevance criteria because it contains G2 ranked pinyon-/needle-and-thread woodlands, which is a natural system in the form of a		
	rare terrestrial plant community. This site also meets the relevance criteria because it contains		
	G2 ranked Mancos milkvetch - Eastwood's monkeyflower herbaceous vegetation, which is a natural system in the form of a rare terrestrial plant community. This site also meets the		
	relevance criteria because of its significant scenic value.		
Importance criteria	Naturita milkvetch, Eastwood's monkeyflower, pinyon-juniper/needle-and-thread woodlands, and Mancos columbine - Eastwood's monkeyflower herbaceous vegetation meet the importance criteria because they have more than locally significant qualities due to their rarity (G2 and S1 ranks), which gives them special worth and cause for concern, and they meet the importance criteria because their rarity gives them qualities that make them fragile, sensitive, rare, and vulnerable to adverse change. Naturita milkvetch and Eastwood's monkeyflower also		
	meet the importance criteria because of their designation on the BLM State Director's sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA. Naturita milkvetch, Eastwood's monkeyflower, and Mancos columbine		
	- Eastwood's monkeyflower herbaceous vegetation also meet the importance criteria because of their designation as high-priority species or plant communities in the San Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and cause for concern, and which recognizes them as warranting protection in order to carry out the mandates of FLPMA.		
	The scenic value also meets the importance criteria because it has more than locally significant qualities due to the size and depth of the canyon, which gives it special worth and		
	distinctiveness.		
Determination	The McIntyre Canyon nominated ACEC meets both the relevance and importance criteria. The		
Determination			
Dropogod I D	determination regarding its designation is "to be determined" based on the plan amendment.  Proposed I PMP Direction to Protect Polygone and Importance Values within Maintage Conven		
Common to all	Proposed LRMP Direction to Protect Relevance and Importance Values within McIntyre Canyon		
	• Within Dolores River Canyon area (see Volume 1, Section 3.23).		
values	2.2.73 Agency actions should be designed to avoid or minimize impacts in canyon		
	escarpments, unless the activity is designed to maintain or restore the composition, structure,		
	or function of the terrestrial ecosystems within those escarpments.		
	NSO: Dolores River Canyon.		
Naturita milkvetch	CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive plants.		
Eastwood's	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied		
monkeyflower	by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.		
	• 2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in		
	terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant		
	community conservation status ranks in order to maintain the ecological integrity of those		
	rare plant communities.		
	2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road activities and activities and activities are travely) and the second activities and activities are travely as a second activities.		
	construction, water pumping, and peat removal) must not occur.		
	• 2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in		
	riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2		
	NatureServe plant community conservation status ranks, including wild privet ( <i>Forestiera</i>		
	pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis) woodlands, in order to maintain the acalogical integrity of those rare plant communities.		
	in order to maintain the ecological integrity of those rare plant communities.		
	3.23.9 Management activities and recreational use should avoid or minimize impacts to rare		

	T
	or unique plant communities.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's
	sensitive plants.
Pinyon pine/Utah juniper/Needle- and-thread Woodlands	<ul> <li>2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant community conservation status ranks in order to maintain the ecological integrity of those rare plant communities.</li> <li>3.23.9 Management activities and recreational use should avoid or minimize impacts to rare or unique plant communities.</li> </ul>
	CSU: Lands with biological soil crusts.
Mancos columbine- Eastwood's monkeyflower herbaceous vegetation	<ul> <li>2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are occupied by special status plant species must be designed to maintain the hydrologic systems necessary to support and sustain those species.</li> <li>2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe plant community conservation status ranks in order to maintain the ecological integrity of those rare plant communities.</li> <li>2.4.19 Long-term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.</li> <li>2.4.23 Agency actions should avoid or otherwise mitigate long-term adverse impacts in riparian area and wetland ecosystems that have plant communities with G1, G2, S1, or S2 NatureServe plant community conservation status ranks, including wild privet (Forestiera pubescens) shrublands and boxelder/river birch (Acer negundo/Betula fontinalis) woodlands, in order to maintain the ecological integrity of those rare plant communities.</li> <li>G3.23.9 Management activities and recreational use should avoid or minimize impacts to rare or unique plant communities.</li> <li>NSO: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive plants.</li> </ul>
Significant scenic value	NSO stipulation: High scenic integrity objective and VRM Class II areas.

#### Mesa Verde Entrance

Nominator	LRMP interdisciplinary planning team
Location	Montezuma County, east of Cortez near the entrance to Mesa Verde National Park.
Description	This nominated ACEC contains BLM lands within the Mesa Verde Entrance PCA. Elevation is
	6,800 to 8,427 feet and size is 1,268 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Gray's Townsend daisy
	(Townsendia glabella), S1 ranked large-flowered wild hollyhock (Iliamna grandiflora), S2
	ranked San Juan gilia (Gilia haydenii), and S2 ranked short-stem penstemon, which are all
	natural systems in the form of rare (G2, S1, and S2 ranks) terrestrial plant species.
Importance	Gray's Townsend daisy, large-flowered wild hollyhock, San Juan gilia, and short-stem
criteria	penstemon meet the importance criteria because they have more than locally significant
	qualities due to their rarity (G2, S2, and S1 ranks), which give them special worth and cause for
	concern, and because they have qualities that make them sensitive, unique, and vulnerable to
	adverse change. Short-stem penstemon also meets the importance criteria because of its
	designation as a high-priority species in the San Juan Biodiversity Model, which gives it special
	worth, meaning, distinctiveness, and cause for concern, and which recognizes it as warranting
	protection in order to carry out the mandates of FLPMA.
Determination	The Mesa Verde Entrance nominated ACEC meets both the relevance and importance criteria.

	The determination regarding its designation is "to be determined" based on the plan amendment.
Proposed LRMP Direction to Protect Relevance and Importance Values within Mesa Verde Entran	
Common to all values	CSU: Lands with 25% to 35% slopes and lands with shale soils.
Gray's Townsend daisy	See protections common to all values.
Large-flowered wild hollyhock	See protections common to all values.
San Juan gilia	See protections common to all values.
Short-stem penstemon	See protections common to all values.

#### **Muleshoe Bench**

Nominator	LRMP interdisciplinary planning team
Location	San Miguel County, Colorado, southeast of the confluence of Coyote Wash and the Dolores
	River.
Description	This nominated ACEC contains BLM lands within the Muleshoe Bench PCA. Its size is 663
	acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains S2 ranked needle-and-thread Great
	Basin herbaceous vegetation, which is a natural system in the form of a rare terrestrial plant
	community.
Importance	Needle-and-thread Great Basin herbaceous vegetation meets the importance criteria because it
criteria	has more than locally significant qualities due to its rarity (S2 rank), which gives it special
	worth and cause for concern, and this plant community meets the importance criteria because
	its rarity gives it qualities that make it unique, rare, and vulnerable to adverse change.
Determination	The Muleshoe Bench nominated ACEC meets both the relevance and importance criteria. The
	determination regarding its designation is "to be determined" based on the plan amendment.
Proposed LRMP Direction to Protect Relevance and Importance Values within Muleshoe Bench	
Common to all	Within Dolores River WSA.
values	
Needle-and-	See protections common to all values.
thread Great	
Basin herbaceous	
vegetation	

### Northdale

Nominator	LRMP interdisciplinary planning team	
Location	Dolores County, north and west of Dove Creek, and a small piece in San Miguel County	
Description	This nominated ACEC contains BLM lands within the Northdale/Dove Creek PCA. It contains	
	parcels of BLM land that are occupied by the Dove Creek subpopulation of the Gunnison sage-	
	grouse, and has been proposed as critical habitat for the grouse. Almost all habitat occupied by	
	the sage grouse in this general area is on private lands. Elevation ranges from 6,600 to 8,100	
	feet. Size is 875 acres of BLM land. The Dove Creek subpopulation is threatened by habitat	
	loss from subdivisions, poor habitat quality and quantity, low existing genetic diversity, and	
	lack of linkages with other populations. Management is guided by the CPW through the	
	Gunnison Sage-grouse Rangewide Conservation Plan.	
Relevance criteria	This site meets the relevance criteria because it contains G1 ranked Gunnison sage-grouse (and its	
	habitat), which is a rare wildlife resource, and it meets the relevance criteria because the Gunnison	
	sage-grouse is a wildlife resource that is on the BLM State Director's sensitive species list.	
Importance	Gunnison sage-grouse meets the importance criteria because its rarity (G1 rank) gives it more	
criteria	than locally significant qualities, which gives it special worth, distinctiveness, and cause for	
	concern, and it meets the importance criteria because its rarity gives it qualities or circumstances	
	that make it sensitive, rare, unique, threatened, and vulnerable to adverse change. The Gunnison	

	sage-grouse also meets the importance criteria because of its designation on the BLM State		
	Director's sensitive species list, which gives it special worth, meaning, distinctiveness, and cause		
	for concern, and which recognizes it as warranting protection in order to carry out the mandates		
	of FLPMA. The Gunnison sage-grouse also meets the importance criteria because of its		
	designation as a high-priority species in the San Juan Biodiversity Model, which gives it special		
	worth, meaning, distinctiveness, and cause for concern, and which recognizes it as warranting		
protection in order to carry out the mandates of FLPMA.			
Determination	The Northdale nominated ACEC meets both the relevance and importance criteria. The		
	determination regarding its designation is "to be determined" based on the plan amendment.		
	d LRMP Direction to Protect Relevance and Importance Values within Northdale		
Gunnison sage-	• 2.3.45 Gunnison sage-grouse: Management activities must not occur from March 1 to June		
grouse	30 within occupied habitat suitable for nesting to allow for breeding and December 1 to		
	March 15 for known winter habitat.		
	2.3.46 Gunnison sage-grouse: New structural improvements or surface disturbance must		
	not occur within known winter concentration area or within a 0.6-mile radius of known		
	Gunnison sage-grouse leks.		
	• 2.3.47 Gunnison sage-grouse: In occupied habitat fuels treatments must be designed and		
	implemented with an emphasis on protecting and enhancing existing sagebrush ecosystems		
	2.3.48 Gunnison sage-grouse: Invasive vegetation must be monitored and controlled post-		
	treatment.		
	• 2.3.70 Structures in sage-grouse habitat should be constructed to limit risk of collision and		
	predation		
	2.3.71 New noise sources resulting from management activities should not contribute to		
	noise levels that negatively impact sage-grouse leks during the active lek season (March 1		
	to June 30) based on best available science.		
	• 2.3.72 Projects in occupied Gunnison sage-grouse habitat should be designed to mitigate or		
	avoid the direct or indirect loss of habitat necessary for maintenance of the local population		
	or reduce to acceptable levels the direct or indirect loss of important habitat necessary for		
	sustainable local populations. Projects will incorporate special reclamation measures or		
	design features that accelerate recovery and/or re-establishment of affected sage-grouse		
	habitat as much as possible.		
	• 2.3.73 Applicable BMPs should be applied to all mineral proposals as Conditions of		
	Approval within occupied sage-grouse habitat to provide for adequate effective habitat and		
	breeding, nesting, and wintering habitat.		
	• 2.3.74 Remote methodologies for monitoring, transporting fluids to centralized collection		
	tanks, etc., should be utilized to minimize human disturbance in Gunnison sage-grouse		
	habitat.		
	• 2.3.75 Fuels treatments should be designed to meet strategic protection of identified		
	occupied sage-grouse habitat.		
	• 2.3.76 Use of native seeds should be used for revegetation following fuels management		
	treatment based on availability, adaptation (site potential), and probability of success		
	(Richards et al. 1998). Where probability of success or native seed availability is low, non-		
	native seeds may be used as long as they meet sage-grouse habitat objectives		
	• 2.3.77 Within occupied Gunnison sage-grouse critical habitat the Rangewide Conservation		
	Plan grazing guidelines should be incorporated when appropriate.		
	• 2.3.78 Within occupied habitat, grazing in treatment areas should be deferred for two		
	growing seasons after treatment, unless needed for seedbed preparation or desired		
	understory and overstory are established.		
	• 2.3.79 When developing or modifying water developments, BMPs (see Appendix N)		
	should be used to mitigate potential impacts from West Nile virus on sage-grouse within		
	occupied habitat.		
	NSO stipulation: Gunnison sage-grouse occupied critical habitat.		
	CSU stipulation: Gunnison sage-grouse occupied critical habitat.		
	CSU stipulation: Gunnison sage-grouse occupied critical habitat.      CSU stipulation: Gunnison sage-grouse proposed unoccupied critical habitat.		
	- C50 supmation. Outmison sage-grouse proposed unoccupied critical nabitat.		

	•	CSU stipulation: Gunnison sage-grouse noise restrictions, occupied and unoccupie	ed
		critical habitat.	

Picayune Gulch

Nominator	LRMP interdisciplinary planning team
Location	San Juan County, Colorado
Description	This nominated ACEC contains BLM lands within the Picayune Gulch PCA. It is in a mountain valley with extensive wetlands. Elevation is 12,000 to 12,200 feet and size is 23 acres of BLM land.
Relevance criteria	This site does not meet the relevance criteria because it does not contain appropriate historic, cultural, or scenic values, fish or wildlife resources, natural processes or systems, or natural hazards. G3S3 ranked alpine tundra draba ( <i>Draba streptobrachia</i> ) and G3S3 ranked thickleaf draba ( <i>D. crassa</i> ) don't meet the relevance criteria because of their relative abundance (compared to G1, G2, S1, or S2 ranked species).
Importance criteria	Not applicable.
Determination	The Picayune Gulch nominated ACEC does not meet the relevance criteria so it was not identified as a potential ACEC and was not further analyzed in the BLM planning process.

Silvey's Pocket

Nominator	San Juan Citizens Alliance, Center for Native Ecosystems
Location	8.5 air miles southwest of Bedrock, in extreme southwestern Montrose County
Description	This nominated ACEC contains BLM lands within the Silvey's Pocket PCA. It includes mesa
	tops and a broad bench south of Coyote Wash. Elevation is 5,300 to 5,800 feet and size is 707
	acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Naturita milkvetch and S2
	ranked aromatic Indian breadroot ( <i>Pediomelum aromaticum</i> ), which is natural systems in the
	form of rare (G2 and S2 ranks) terrestrial plant species. This site also meets the relevance
	criteria because Naturita milkvetch and aromatic Indian breadroot are natural systems that are
	on the BLM State Director's sensitive species list. This site also meets the relevance criteria
	because it contains S2 ranked needle-and-thread Great Basin herbaceous vegetation, which is a
_	natural system in the form of a rare terrestrial plant community.
Importance	Naturita milkvetch and aromatic Indian breadroot meet the importance criteria because they
criteria	have more than locally significant qualities due to their rarity (G2 and S2 ranks), which give
	them special worth and cause for concern, and these species meet because their rarity gives
	them qualities that make them sensitive, unique, rare, and vulnerable to adverse change.
	Naturita milkvetch and aromatic Indian breadroot also meet the importance criteria because of
	their designation on the BLM State Director's sensitive species list, which gives them special
	worth, meaning, distinctiveness, and cause for concern, and which recognizes them as
	warranting protection in order to carry out the mandates of FLPMA. Naturita milkvetch and
	aromatic Indian breadroot also meet the importance criteria because of their designation as
	high-priority species in the San Juan Biodiversity Model, which gives them special worth,
	meaning, distinctiveness, and cause for concern, and which recognizes them as warranting
	protection in order to carry out the mandates of FLPMA. Needle-and-thread Great Basin
	herbaceous vegetation meets the importance criteria because it has more than locally significant
	qualities due to its rarity (S2 rank), which gives it special worth and cause for concern, and this
	plant community meets the importance criteria because its rarity gives it qualities that make it
Determination	sensitive, rare, and vulnerable to adverse change.
Determination	The Silvey's Pocket nominated ACEC meets both the relevance and importance criteria. The
	determination regarding its designation is "to be determined" based on the plan amendment.

# Slick Rock

Nominator	San Juan Citizens Alliance, Center for Native Ecosystems
Location	San Miguel County approximately 18 miles north of the town of Dove Creek

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Description	This nominated ACEC contains BLM lands within the Slick Rock and Slick Rock Hill PCAs. It
	does not include Poverty Flats or lands within the Dolores River Canyon. These nominated
	ACECs were combined due to their close proximity and because of the similar relevance values
	they contain (BLM Manual 161322A5). Elevation is 5,600 to 7,200 feet and size is 3,340
	acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 ranked Naturita milkvetch and S2
	ranked short-stem penstemon, which are natural systems in the form of rare (G2 and S2 ranks)
	terrestrial plant species. This site also meets the relevance criteria because Naturita milkvetch a
	natural system that is on the BLM State Director's sensitive species list. This site also meets the
	relevance criteria because it contains canyon tree frog, which is a wildlife resource that is on
	the BLM State Director's sensitive species list. This site also meets the relevance criteria
	because it contains S2 ranked needle-and-thread Great Basin herbaceous vegetation, which is a
	natural system in the form of a rare terrestrial plant community.
Importance	Naturita milkvetch, short-stem penstemon, and canyon tree frog meet the importance criteria
criteria	because they have more than locally significant qualities due to their rarity (G2 and S2 ranks),
	which gives them special worth and cause for concern, and these species meet the importance
	criteria because their rarity gives them qualities that make them sensitive, unique, rare, and
	vulnerable to adverse change. Naturita milkvetch, short-stem penstemon, and canyon tree frog
	also meet the importance criteria because they have more than locally significant qualities due
	to their designation as BLM State Director's sensitive species, which gives them special worth,
	meaning, distinctiveness, and cause for concern, and which recognizes them as warranting
	protection in order to carry out the mandates of FLPMA. Naturita milkvetch, short-stem
	penstemon, and canyon tree frog also meet the importance criteria because of their designation
	as high-priority species in the San Juan Biodiversity Model, which gives them special worth,
	meaning, distinctiveness, and cause for concern, and which recognizes them as warranting
	protection in order to carry out the mandates of FLPMA. Needle-and-thread Great Basin
	herbaceous vegetation meets the importance criteria because it has more than locally significant
	qualities due to its rarity (S2 rank), which gives it special worth and cause for concern, and this
	plant community meets the importance criteria because its rarity gives it qualities that make it
	sensitive, unique, rare, and vulnerable to adverse change.
Determination	Slick Rock nominated ACEC meets both the relevance and importance criteria. The
Determination	determination regarding its designation is "to be determined" based on the plan amendment.
Dronoso	d LRMP Direction to Protect Relevance and Importance Values within Slick Rock
Common to all	
values	
Naturita	Energy lease tracts) (see Volume 2, Section 3.23).
	CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive
milkvetch	plants.
Short-stem	See protections common to all values.
penstemon	
Canyon tree frog	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
and its habitat	occupied by special status plant species must be designed to maintain the hydrologic
	systems necessary to support and sustain those species.
	• 2.3.50 In order to determine site occupation, pre-implementation surveys may be required
	for projects occurring in habitats that may support populations of sensitive species and
	species listed or proposed under the ESA, as determined by an agency biologist.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
Needle-and-	3.23.9 Management activities and recreational use should avoid or minimize impacts to
thread Great	rare or unique plant communities.
Basin herbaceous	
vegetation	

#### Snaggletooth

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Nominator	LRMP interdisciplinary planning team

Location	Six miles east of Dove Creek in Dolores and San Miguel Counties, Colorado
Description	This nominated ACEC includes a 30 mile stretch of the Dolores River Canyon from the
Bescription	Bradfield Bridge downstream to approximately river mile 125. A large part of the site is
	roadless and remote. It is included in the Dolores River Canyon Special Management Area.
	Elevation is 5,600 to 6,500 feet and size is 19,427 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G2 (rounded) ranked roundtail chub
	(and its habitat), which is a rare fish resource. This site also meets the relevance criteria because
	it contains roundtail chub, flannelmouth sucker, and bluehead sucker ( <i>Catostomus discobolus</i> )
	(and their habitat), which are fish resources that are on the BLM State Director's sensitive
	species list. This site also meets the relevance criteria because it contains G2 peregrine falcon
	(and its habitat), which is a rare wildlife resource that is on the BLM State Director's sensitive
	species list. It also meets the relevance criteria because of its significant scenic value in the
	form of diverse and extreme topography, and diverse and colorful sedimentary geology.
Importance	Roundtail chub and peregrine falcon meet the importance criteria because they have more than
criteria	locally significant qualities due to their rarity (G2 ranks), which gives them special worth and
	cause for concern. Roundtail chub and peregrine falcon also meet the importance criteria
	because their rarity gives them qualities that make them fragile, sensitive, rare, and vulnerable
	to adverse change. Roundtail chub, flannelmouth sucker, peregrine falcon, and bluehead sucker
	also meet the importance criteria because of their designation on the BLM State Director's
	sensitive species list, which gives them special worth, meaning, distinctiveness, and cause for
	concern, and which recognizes them as warranting protection in order to carry out the mandates
	of FLPMA. Roundtail chub, flannelmouth sucker, bluehead sucker, and peregrine falcon also
	meet the importance criteria because of their designation as high-priority species in the San
	Juan Biodiversity Model, which gives them special worth, meaning, distinctiveness, and cause
	for concern, and which recognizes them as warranting protection in order to carry out the
	mandates of FLPMA. The scenic value also meets the importance criteria because it has more
	than locally significant qualities due to the large size and extreme depth of the canyon and the
Determination	diverse colorful geology of the canyon, which gives it special worth and distinctiveness.
Determination	The Snaggletooth nominated ACEC meets both the relevance and importance criteria. The determination regarding its designation is "to be determined" based on the plan amendment.
Proposed	LRMP Direction to Protect Relevance and Importance Values within Snaggletooth
Common to all	Within Dolores River Canyon area (see Volume 1, Section 3.23).
values	Within lands with wilderness characteristics.
	NSO stipulation: Dolores River Canyon.
Roundtail chub	• 2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
habitat	occupied by special status plant species must be designed to maintain the hydrologic
	systems necessary to support and sustain those species.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
	NSO stipulation: Major river corridors.
Flannelmouth	2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
sucker and its	occupied by special status plant species must be designed to maintain the hydrologic
habitat	systems necessary to support and sustain those species.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
	NSO stipulation: Major river corridors.
Bluehead sucker	2.2.67 Projects or activities occurring in fens, wetlands, or hanging gardens that are
	occupied by special status plant species must be designed to maintain the hydrologic
	systems necessary to support and sustain those species.
	NSO: Perennial streams, water bodies, riparian areas, and fens.
	CSU: Perennial streams, water bodies, riparian areas, and fens.
	NSO stipulation: Major river corridors.
Peregrine falcon	2.3.35 Protection of nests from new structures and human encroachment (see LRMP Table
and its habitat	2.3.2)
ana no maonat	1 4.2.21

	<ul> <li>NSO stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>CSU stipulation: Perennial streams, water bodies, riparian areas, and fens.</li> <li>NSO stipulation: Major river corridors.</li> </ul>
Significant scenic value	1 J

### **Spring Creek Basin**

Nominator	LRMP interdisciplinary planning team
Location	San Miguel County about 20 miles north of Dove Creek near the foot of McKenna Peak
Description	This nominated ACEC contains BLM lands within the Spring Creek Basin PCA. Elevation is
1	6,300 feet and size is 5,589 acres of BLM land.
Relevance criteria	This site meets the relevance criteria because it contains G1 ranked Gypsum Valley cat-eye, S1
	ranked pygmy sagebrush ( <i>Artemisia pygmaea</i> ), and S2 ranked flex-stemmed mariposa lily,
	which are natural systems in the form of rare (G1, S1, S2 ranks) terrestrial plant species. This
	site also meets the relevance criteria because Gypsum Valley cat-eye is a natural system that is
	on the BLM State Director's sensitive species list.
Importance	Gypsum Valley cat-eye and pygmy sagebrush Artemisia pygmaea meet the importance criteria
criteria	because they have more than locally significant qualities due to their rarity (G1 and S1 ranks),
	which give them special worth and cause for concern, and these species meet the importance
	criteria because their rarity gives them qualities that make them sensitive, unique, rare, and
	vulnerable to adverse change. Gypsum Valley cat-eye also meets the importance criteria
	because a large portion of its entire range and most of the documented occurrences of the
	species are on SJNF and TRFO, which gives it more than locally significant qualities that are of
	special worth and cause for concern. Gypsum Valley cat-eye also meets the importance criteria
	because of its designation on the BLM State Director's sensitive species list, which gives it
	special worth, meaning, distinctiveness, and cause for concern, and which recognizes it as
	warranting protection in order to carry out the mandates of FLPMA. Flex-stemmed mariposa
	lily and Gypsum Valley cat-eye also meets the importance criteria because of its designation as
	high-priority species in the San Juan Biodiversity Model, which gives it special worth,
	meaning, distinctiveness, and cause for concern, and which recognizes it as warranting
	protection in order to carry out the mandates of FLPMA.
Determination	The Spring Creek Basin nominated ACEC meets both the relevance and importance criteria.
	The determination regarding its designation is "to be determined" based on the plan
	amendment.
Proposed LR	MP Direction to Protect Relevance and Importance Values within Spring Creek Basin
Common to all	2.2.68 Projects or activities that occur in shale and gypsum soils that are occupied by
values	special status plant species must be designed to maintain the soil characteristics necessary
	to support and sustain those species.
	2.2.79 Management activities in areas with biological soil crusts should be designed to
	minimize adverse impacts to the soil crusts.
	2.2.80 Ground disturbance should be limited or otherwise mitigated on gypsum soils and
	organic soils (histosols) in order to protect the ecological integrity of these rare and unique
	soils and the rare plants associated with these soils.
	CSU: Lands with gypsum soils.
	CSU: Lands with biological soil crusts.
	Partially within McKenna Peak WSA.
Gypsum Valley	CSU: Colorado BLM State Director's sensitive plants and R2 Regional Forester's sensitive
cat-eye	plants.

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